

example, the most likely next character to be entered by the user, as determined at the block 508, is the letter “c”. Visual aid 608a shows the letter “c” enlarged on the keyboard 602, outlined with a solid line, and lightened in colour such that the letter “c” is the largest and/or brightest key on the keyboard 154. The enlargement of the letter “c” additionally serves to make the letter “c” easier to press, in the example of a touch screen display 142. In another example embodiment, selection of a neighbouring key such as “x” that constitutes an unlikely input causes the letter “c” to be notwithstandingly presented as the first option 606a, and the letter “x” as a second option 606b.

[0067] Further in the present example, the next most likely next character to be entered by the user after the letter “c”, as determined at the block 508, is the letter “o”. Visual aid 608b shows the letter “o” enlarged on the keyboard 602 (although not as enlarged as the letter “c”), outlined with a solid line, and lightened in colour (although not lightened as much as the letter “c”) such that the letter “o” is the second largest and/or brightest key on the keyboard. The enlargement of the letter “o” additionally serves to make the letter “o” easier to press for selection, in the example of a touch screen display 142. Further in the present example, the next most likely character to be entered by the user after the letter o, as determined at the block 508, is the letter “m”. Visual aid 608c shows the letter “m” outlined with a solid line. Therefore, in the presently described example, the most likely letters to be used in entering com after “www.rim.” are identified using visual aids to make the entry of this text easier, particularly on a touch screen device. These visual aids may be referred to as differential visual aids that accentuate the anticipated order of the key presses in a way that conveys to the user what the expected order of the key presses will be, as shown by visual aids 608a, 608b, and 608c. The differential visual aids may be presented, for example, as size, colour, shading, or outlining differentiation. Audible queues may also be used, for example for people with sight impairments, with queues of differing loudness indicating the anticipated order of the key presses. While the examples of key enlargements, different shading, key outlining, and audible queues are used, these effects may be used together in any combination or in isolation. Additionally, different colours may be used for the keys representing the likely inputs.

[0068] Reference is next made to FIG. 7, which shows a screen shot of another example user interface 700 for implementing context-based predictive text input in accordance with one embodiment. The user interface 700 provides added visual aids over the user interface 600, indicated by references 610a, 610b, 612a, and 612b. Visual aids 610a and 610b illustrate key presses associated with the second most likely option 606b, where the entry “www.rim.” is completed with “.co.uk”. As shown by visual aids 610a and 610b, keys for letters “u” and “k” on the keyboard 602 are presented with an outline surrounding the keys. Visual aids 612a and 612b illustrate key presses associated with the third most likely option 606c, where the entry “www.rim.” is completed with de. As shown by visual aids 612a and 612b, keys associated with letters “d” and “e” on the keyboard 602 are presented in a lighter grey shading that is distinctive from the default shading associated with the other keys. In this way, all of the keys on the keyboard 602 that are associated with the top three options for completing the entry, indicated by references 606, are emphasized with visual aids. This differential approach to the visual aids allows the user of the keyboard 602 to quickly

identify the order of the keys to be pressed for the option 606a, as well as the keys associated with options 606b and 606c.

[0069] The method 500 and the exemplary user interface and visual aids shown in FIGS. 6 and 7 are iterative in nature. For example, referring to FIG. 7, if the user enters a d in response to the keyboard shown in FIG. 7, in the next iteration of the method 500, visual aids 608a-c, 610a-b, and 612a would be dispensed with and the respective keys returned to default size and shading with no outlining, as these keys are likely not relevant to predictions produced by subsequent iterations. Since the likely expected next key would be e to complete “www.rim.de”, the “e” key may next be shown according to the format illustrated with visual aid 608a, where the e key may be enlarged, lightened in colour, and outlined. Additionally, there may be other suggested options determined by the method 500 and displayed in the next iteration.

[0070] Further, while the method 500 is shown as being executed with the blocks occurring in a particular order, the blocks may be executed in different orders, as appropriate, and some of the blocks may be omitted, as appropriate, in various iterations of the method 500.

[0071] While the example shown in FIGS. 6 and 7 predicts completions based on previously entered WEB addresses or stored web addresses, predicted completions may be based on numerous additional factors, such as grammatical rules or the positional context of words in a phrase. The method 500 may also provide suggestions for disambiguation for Eastern languages based on any of the factors outlined above, such as grammar, context, previously usage, etc.

[0072] The embodiments of the present disclosure described above are intended to be examples only. Those of skill in the art may effect alterations, modifications and variations to the particular embodiments without departing from the intended scope of the present disclosure. In particular, selected features from one or more of the above-described embodiments may be combined to create alternative embodiments not explicitly described, features suitable for such combinations being readily apparent to persons skilled in the art. The subject matter described herein in the recited claims intends to cover and embrace all suitable changes in technology.

#### 1. A device comprising:

- a processor for controlling operation of the device;
  - a keyboard coupled to the processor for accepting an input;
  - at least one display device coupled to the processor for communicating an output;
  - a memory coupled to the processor; and
  - a storage device coupled to the processor;
- the device including a predictive text module resident in the memory for execution by the processor, the predictive text module being configured to:
- receive an input from the keyboard, the input comprising a character of a string;
  - gather relevant contextual data based on the input;
  - retrieve any relevant stored data from the storage device based on the input;
  - generate at least one context based prediction based on the received input, the contextual data, and any relevant stored data;
  - display at least one option for completing the string on the display screen based on the at least one prediction; and